Author Index for Volume 229

Abass, A. K., 113
Abo El Soud, A. M. 232
Ahn, B. T., 227
Albrecht, H., 29
Amulevičius, A., 192
Arai, T., 171
Asomoza, M., 196
Asomoza, R., 196

Balčiūnienė, M., 192
Barna, P. B., 37, 107
Barth, W., 54
Barua, A. K., 216
Bäuerle, P., 255
Beddies, G., 137
Bender, A., 29
Boiko, B. T., 207
Bouché-Pillon, D., 260
Bouroushian, M., 101
Bretschneider, W., 137
Bryja, L., 11

Chen, H., 51, 143
Chen, X., 51
Chiou, B.-S., 146
Chu, Y. T., 119
Collins, R. A., 113
Cook, M. J., 8
Córdoba de Torresi, S. I., 180

Daniska, V., 24
De, A., 216
De, M., 140
Du, W., 122
de la L. Olvera A., M., 196

Fadel, M., 223
Fan, Q., 51, 143
Franke, Th., 137
Friedrich, J., 14
Fujiyama, T., 17

Gadave, K. M., 1
Gao, M., 249
Gerber, Th., 29
Geszti, O., 37
Gorenstein, A., 180
Günter, J. R., 37

Han, M., 249
Han, Z., 237
Härtel, Th., 163
Hashimoto, M., 107
Hata, T., 17
Helmersson U., 237
Helms, H., 137
Higuchi, H., 133
Himmel, B., 29
Hino, T., 201
Hiraki, A., 93
Hirohata, Y., 201
Hong, Y., 51
Horita, S., 17
Hsieh, S.-T., 146

Im, H. B., 227
Ito, T., 93

Jackson, A. D., 5
Jezierski, K., 11
Jones, P. A., 5

Kim, D. S., 227
Kim, H.-G., 187
Kim, S. Y., 227
Kitson, S. C., 128
Komorita, K., 156
Konagai, M., 196
Kopach, V. R., 207
Kosuge, A., 107
Krier, A., 113
Kubono, A., 133
Küppers, K., 163

Lange, Chr., 137
Lee, C.-Y., 63
Lee, H.-Y., 187
Li, R., 255
Li, T., 249
Lickiss, P. D., 5
Lile, D., 54
Lin, K.-L., 63
Liu, H., 58
Liu, S., 122
Liu, W., 249
Loizos, Z., 101
Lokhande, C. D., 1
Luby, S., 24
Luches, A., 24

Majkova, E., 24
Makabe, Y., 201
Maldonada, A., 196
Maleysson, C., 260
Martino, M., 24
Maurin, G., 101
Melentjev, S. M., 207
Misiewicz, J., 11
Moon, J., 93
Mukhopadhyay, S., 8
Murakawa, M., 17

Nakai, H., 107
Nishimura, H., 156

Okui, N., 133

Pancheha, P. A., 207
Pauly, A., 260
Pecz, B., 107
Perrone, A., 24
Petrétis, Br., 192
Pileckis, R., 192
Pilkington, R. D., 5
Pivin, J. C., 83
Pozdeev, Yu. L., 207
Pradhan, S. K., 140

Qui, H., 107

Ramesham, R., 44
Ray, A. K., 8
Ray, S., 216
Ren, Y., 249
Roth, S., 255
Roy, R., 140

Sáfrán, G., 37, 107
Sambles, J. R., 128
Schmelzer, M., 255
Schober, T., 14
Sedeek, H., 223
Selinder, T. I., 237
Sen, S. K., 140
Soliman, L. I., 232
Spyrellis, N., 101
Starikov, V. V., 207
Strüber, U., 163

Tajima, T., 17
Teichert, S., 137
Torresi, R. M., 180

Umemoto, S., 133

Vázquez, M. V., 180

Wallenberg, L. R., 237
Wu, X., 33
Wu, Z., 33

Xu, S., 58

Yamashina, T., 201
Yang, J., 249
Yoshida, A., 156
Yu, L.-G., 76
Yugo, S., 107

Zayed, H. A., 232
Zhang, P., 58
Zhang, S., 33
Zhang, X., 58
Zhang, X.-S., 76
Zhao, W., 58
Zhao, Y., 249

Subject Index for Volume 229

Alloys
  effect of deposition parameters on the properties of amorphous silicon–germanium alloy films grown by photo-CVD method, 216
Aluminium oxide
  determination of the optical dielectric functions of thin absorbing films from IR reflectivity measurements, 119
Amorphous materials
  comparison of the degradation modes in sandwich structures including amorphous oxides of niobium and tantalum, 207
  effect of deposition parameters on the properties of amorphous silicon–germanium alloy films grown by photo-CVD method, 216
  materials interaction in Pb–Sn/Ni–P/Al and Pb–Sn/Ni–B/Al solder bumps on chip, 63
Anisotropy
  critical edge studies of highly absorbing anisotropic films, 128
  structural study on the polar Langmuir–Blodgett films of a new azo-containing polymer through polarized infrared and UV–visible spectroscopy, 249
Annealing
  structure of $(AlPcF)_n$ thin films as a function of annealing conditions, 260
Anodic oxidation
  structural change due to thermal treatment and dielectric properties of anodic oxide films of bismuth, 156

Bismuth
  structural change due to thermal treatment and dielectric properties of anodic oxide films of bismuth, 156
Boron
  materials interaction in Pb–Sn/Ni–P/Al and Pb–Sn/Ni–B/Al solder bumps on chip, 63
  on the synthesis of Fe–B system thin films from powder mixtures under the influence of laser radiation, 192

Cadmium selenide
  influence of heat treatment on structure and properties of electrodeposited CdSe or Cd(Te, Se) semiconducting coatings, 101
Cadmium sulphide
  structural, electrical and optical properties of In–doped CdS thin films prepared by vacuum coevaporation, 227
Cadmium telluride
  influence of heat treatment on structure and properties of electrodeposited CdSe of Cd(Te, Se) semiconducting coatings, 101
Carbides
  behavior of nucleation and growth of carbide layers on alloyed carbide particles in substrates in salt bath carbide coating, 171
Cathodes
  symmetrical magnet magnetron-sputtering method for film deposition, 51
Chalcogenide
  electrical and optical studies in some Bi doped amorphous chalcogenide thin films, 223
Chalcogens
  influence of heat treatment on structure and properties of electrodeposited CdSe of Cd(Te, Se) semiconducting coatings, 101
Chalopyrites
  transport properties of the compounds $CuInS_2$, $CuInSe_2$ and $CuInTe_2$ thin films, 232
Chemical vapour deposition
  effect of deposition parameters on the properties of amorphous silicon–germanium alloy films grown by photo-CVD method, 216
  molecular orientation of alkyl-aromatic polyimide thin films prepared by vapour deposition polymerization, 133
  the role of gas-phase nucleation in the preparation of TiO_2 films by chemical vapour deposition, 187
Chlorine
  role of chlorine adsorption in the low temperature epitaxial growth of silver, gold and copper on water-treated NaCl, 37
Coatings
  behavior of nucleation and growth of carbide layers on alloyed carbide particles in substrates in salt bath carbide coating, 171
  study of the friction and wear behaviour of electroless Ni–P coating, 76
Computer simulation
  new metastable phases in a Pd/amorphous Si bilayer after annealing, 33

Deposition process
  growth of texturized ZnO:In thin films by chemical spray deposition, 196
  selective growth and characterization of doped polycrystalline diamond thin films, 44
Diamond
  difficulties in estimating the rheological properties of diamond-like films by means of nanoindentation tests, 83
Dielectric properties
  comparison of the degradation modes in sandwich structures including amorphous oxides of niobium, and tantalum, 207
  determination of the optical dielectric functions of thin absorbing films from IR reflectivity measurements, 119
  structural change due to thermal treatment and dielectric properties of anodic films of bismuth, 156
Diffusion
  behavior of nucleation and growth of carbide layers on alloyed carbide particles in substrates in salt bath carbide coating, 171
  materials interaction in Pb–Sn/Ni–P/Al and Pb–Sn/Ni–B/Al solder bumps on chip, 63

Electrical properties and measurements
  effect of deposition parameters on the properties of amorphous silicon-germanium alloy films grown by photo-CVD method, 216
  electrical and optical studies in some Bi doped amorphous chalcogenide thin films, 223
  selective growth and characterization of doped polycrystalline diamond thin films, 44
  structural, electrical and optical properties of In-doped CdS thin films prepared by vacuum coevaporation, 227
Electrochemistry
  infrared chracterization of electrochromic nickel hydroxide prepared by homogeneous chemical precipitation, 180

Electron diffraction
new metastable phases in a Pd/amorphous Si bilayer after annealing, 33
Electron microscopy
new metastable phases in a Pd/amorphous Si bilayer after annealing, 33
Epitaxy
growth and properties of thin Ag films on Pt(111) surfaces, 163
improvement of the crystalline quality of an yttria-stabilized zirconia film on silicon by a new deposition process in reactive sputtering, 17
role of chlorine adsorption in the low temperature epitaxial growth of silver, gold and copper on water-treated NaCl, 37

Fourier transform infrared spectroscopy
molecular orientation of alkyl-aromatic polyimide thin films prepared by vapour deposition polymerization, 133
two-dimensional arrangement of thiophene: highly ordered structures prepared by the Langmuir–Blodgett technique, 255
X-ray reflectivity study of r.f.-sputtered thin SiO_2 films, 29

Glow discharge
growth and characterization of thin SiN films grown on Si by electron cyclotron resonance nitrogen plasma treatment, 93
symmetrical magnet magnetron-sputtering method for film deposition, 51
Growth mechanism
behaviour of nucleation and growth of carbide layers on alloyed carbide particles in substrates in salt bath carbide coating, 171
role of gas-phase nucleation in the preparation of TiO_2 films by chemical vapour deposition, 187

Hardness
difficulties in estimating the rheological properties of diamond-like films by means of nanoindentation tests, 83

Indium
structural, electrical and optical properties of In-doped CdS thin films prepared by vacuum coevaporation, 227
Indium antimonide
role of the native oxide on indium antimonide surface properties, 54
Indium oxide
r.f. magnetron-sputtered indium tin oxide film on a reactively ion-etched acrylic substrate, 146
Infrared spectroscopy
infrared characterization of electrochromic nickel hydroxide prepared by homogeneous chemical precipitation, 180
Interfaces
study of the friction and wear behaviour of electroless Ni–P coating, 76
Ion bombardment
microstructure and tribology of MoS_x films modified by ion beam bombardment, 58
Ion implantation
difficulties in estimating the rheological properties of diamond-like films by means of nanoindentation tests, 83
microstructure and tribology of MoS_x films modified by ion beam bombardment, 58
Iron
on the synthesis of Fe–B system thin films from powder mixtures under the influence of laser radiation, 192

Langmuir–Blodgett films
critical edge studies of highly absorbing anisotropic films, 128
saturated optical non-linearity of bacteriorhodopsin Langmuir–Blodgett films derived from degenerate multiwave mixing, 122
structural study on the polar Langmuir–Blodgett films of a new azo-containing polymer through polarized infrared and UV–visible spectroscopy, 249
two-dimensional arrangement of thiophene: highly ordered structures prepared by the Langmuir–Blodgett technique, 255
X-ray reflectivity study of r.f.-sputtered thin SiO_2 films, 29
Laser irradiation
synthesis of tungsten silicide by pulsed laser irradiation of sputtered alloy layers, 24
Light scattering
saturated optical non-linearity of bacteriorhodopsin Langmuir–Blodgett films derived from degenerate multiwave mixing, 122

Metal-oxide semiconductor structures
role of the native oxide on indium antimonide surface properties, 54
Metals
the role of chlorine adsorption in the low temperature epitaxial growth of silver, gold and copper on water-treated NaCl, 37
Molybdenum
surface roughness of Mo films prepared by magnetron sputtering, 201
Mossbauer spectroscopy
on the synthesis of Fe–B system thin films from powder mixtures under the influence of laser radiation, 192
Multilayers
two-dimensional arrangement of thiophene: highly ordered structures prepared by the Langmuir–Blodgett technique, 255

Nickel
structural and electrical properties of Ni films grown on Si(100) and SiO_2 by d.c. bias sputtering, 107
Nickel oxide
infrared characterization of electrochromic nickel hydroxide prepared by homogeneous chemical precipitation, 180
Niobium oxide
comparison of the degradation modes in sandwich structures including amorphous oxides of niobium, and tantalum, 207
Nitrogen
growth and characterization of thin SiN films grown on Si by electron cyclotron resonance nitrogen plasma treatment, 93

Optical coatings
r.f. magnetron-sputtered indium tin oxide film on a reactively ion-etched acrylic substrate, 146
Optical properties
critical edge studies of highly absorbing anisotropic films, 128
determination of the optical dielectric functions of thin absorbing films from IR reflectivity measurements, 119
electrical and optical studies in some Bi doped amorphous chalcogenide thin films, 223
infrared characterization of electrochromic nickel hydroxide prepared by homogeneous chemical precipitation, 180
optical properties of lead phthalocyanine (PbPc) thin films, 113

r.f. magnetron-sputtered indium tin oxide film on a reactively ion-etched acrylic substrate, 146
saturated optical non-linearity of bacteriorhodopsin Langmuir–Blodgett films derived from degenerative multiwave mixing, 122
structural, electrical and optical properties of In-doped CdS thin films prepared by vacuum coevaporation, 227
Optical spectroscopy
surface roughness of Mo films prepared by magnetron sputtering, 201
two-dimensional arrangement of thiophene: highly ordered structures prepared by the Langmuir–Blodgett technique, 255
Organic substances
structure of $(AlPcF)_n$ thin films as a function of annealing conditions, 260
Oxides
improvement of the crystalline quality of an yttria-stabilized zirconia film on silicon by a new deposition in reactive sputtering, 17

Palladium
new metastable phases in a Pd/amorphous Si bilayer after annealing, 33
Phase transitions
on the synthesis of Fe–B system thin films from powder mixtures under the influence of laser radiation, 192
Phosphorus
materials interaction in Pb–Sn/Ni–P/Al and Pb–Sn/Ni–B/Al solder bumps on chip, 63
Platinum
growth and properties of thin Ag films on Pt(111) surfaces, 163
Polymers
molecular orientation of alkyl-aromatic polyimide thin films prepared by vapour deposition polymerization, 133
structural study on the polar Langmuir–Blodgett films of a new azo-containing polymer through polarized infrared and UV–visible spectroscopy, 249

Raman scattering
selective growth and characterization of doped polycrystalline diamond thin films, 44
Reflection spectroscopy
determination of the optical dielectric functions of thin absorbing films from IR reflectivity measurements, 119
Rutherford backscattering spectroscopy
growth and characterization of thin SiN films grown on Si by electron cyclotron resonance nitrogen plasma treatment, 93

Scanning electron microscopy
selective growth and characterization of doped polycrystalline diamond thin films, 44
structure of $(AlPcF)_n$ thin films as a function of annealing conditions, 260
Semiconductors
influence of heat treatment on structure and properties of electrodeposited CdSe or Cd(Te, Se) semiconducting coatings, 101
optical properties of lead phthalocyanine (PbPc) thin films, 113
Sensors
optical properties of lead phthalocyanine (PbPc) thin films, 113
Silicides
structural and electrical properties of Ni films grown on Si(100) and SiO_2 by d.c. bias sputtering, 107
synthesis of tungsten silicide by pulsed laser irradiation of sputtered alloy layers, 24
Silicon
improvement of the crystalline quality of an yttria-stabilized zirconia film on silicon by a new deposition process in reactive sputtering, 17
new metastable phases in a Pd/amorphous Si bilayer after annealing, 33
Silicon nitride
growth and characterization of thin SiN films grown on Si by electron cyclotron resonance nitrogen plasma treatment, 93
Silver
growth and properties of thin Ag films on Pt(111) surfaces, 163
Sputtering
improvement of the crystalline quality of an yttria-stabilized zirconia film on silicon by a new deposition process in reactive sputtering, 17
structural and electrical properties of Ni films grown on Si(100) and SiO_2 by d.c. bias sputtering, 107
structural characterization of yttria (Y_2O_3) inclusions in $YBa_2Cu_3O_{7-x}$ films: growth model and effect on critical current density, 237
surface roughness of Mo films prepared by magnetron sputtering, 201
symmetrical magnet magnetron-sputtering method for film deposition, 51
Structural properties
comparison of the degradation modes in sandwich structures including amorphous oxides of niobium and tantalum, 207
optical properties of lead phthalocyanine (PbPc) thin films, 113
structural and electrical properties of Ni films grown on Si(100) and SiO_2 by d.c. bias sputtering, 107
surface roughness of Mo films prepared by magnetron sputtering, 201
Sulphides
microstructure and tribology of MoS_x films modified by ion beam bombardment, 58
Superconductivity
structural characterization of yttria (Y_2O_3) inclusions in $YBa_2Cu_3O_{7-x}$ films: growth model and effect on critical current density, 237
Surface and interface states
role of the native oxide on indium antimonide surface properties, 54
Surface structure
microstructure and tribology of MoS_x films modified by ion beam bombardment, 58

Tantalum
comparison of the degradation modes in sandwich structures including amorphous oxides of niobium and tantalum, 207
Tin oxide
r.f. magnetron-sputtered indium tin oxide film on a reactively ion-etched acrylic substrate, 146
Titanium oxide
role of gas-phase nucleation in the preparation of TiO_2 films by chemical vapour deposition, 187
Transmission electron microscopy
structural characterization of yttria (Y_2O_3) inclusions in $YBa_2Cu_3O_{7-x}$ films: growth model and effect on critical current density, 237
Transport properties
transport properties of the compounds $CuInS_2$, $CuInSe_2$ and $CuInTe_2$ thin films, 232

Tribology
study of the friction and wear behaviour of electroless Ni–P coating, 76
Tungsten
synthesis of tungsten silicide by pulsed laser irradiation of sputtered alloy layers, 24

Water
role of chlorine adsorption in the low temperature epitaxial growth of silver, gold and copper on water-treated NaCl, 37

X-ray diffraction
molecular orientation of alkyl-aromatic polyimide thin films prepared by vapour deposition polymerization, 133
structural change due to thermal treatment and dielectric properties of anodic oxide films of bismuth, 156
structural characterization of yttria (Y_2O_3) inclusions in $YBa_2Cu_3O_{7-x}$ films: growth model and effect on critical current density, 237
structure of $(AlPcF)_n$ thin films as a function of annealing conditions, 260
X-ray photoelectron spectroscopy
growth and properties of thin Ag films on Pt(111) surfaces, 163
X-ray total reflection analysis
X-ray reflectivity study of r.f.-sputtered thin SiO_2 films, 29

Zinc oxide
growth of texturized ZnO:In thin films by chemical spray deposition, 196